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AUTHOR McLean, James E.; Chissom, Brad S.
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ABSTRACT

During the 1979-80 school year, the Talents Unlimited (TU) program (validated by the Joint Dissemination Review Panel) for talented students in grades 1 through 6 was evaluated by nine adopting school systems. Five talent areas were addressed: communication, forecasting, decision making, productive thinking, and planning. Data were analyzed for each of the following sites: Lake Village, Arkansas; Little Falls, New York; Homer, Alaska; San Antonio, Texas; Logan, Utah; McAllen, Texas; Staten Island, New York; Kenwood, Michigan; and Cache County, Utah. Among findings were that results of the project in Lake Village were positive but not always statistically significant; that fourth grade students in San Antonio reacted well to the TU methods; that in McAllen, the TU group significantly outperformed the control group on both Flexibility and Originality; and that more students exposed to the TU treatment in Kentwood improved their planning talents than did students not exposed to TU. It was concluded that all of the various studies favored the TU program and most of them achieved statistical significance. (SBH)

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TALENTS UNLIMITED PROGRAM

SUMMARY OF RESEARCH FINDING FOR 1979-80

James E. McLean and Brad S. Chissom

University of Alabama

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Talents Unlimited Project

Mobile County Public Schools

Mobile, Alabama 36601

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TALENTS UNLIMITED PROGRAM

SUMMARY OF RESEARCH FINDINGS FOR 1979-80

Introduction

Talents Unlimited (TU) is an innovative educational program developed under an Elementary and Secondary Education Act (ESEA) of 1965, Title III Grant, and is located in Mobile, Alabama. The program was developed and experimentally tested over a three-year funding period from June, 1971, through June, 1974.

As a result of the success of the program, the project was validated nationally by the Joint Dissemination Review Panel (JDRP) and is now part of the National Diffusion Network. This and other innovative programs are described in Education in Action, 50 Ideas that Work (Park, 1978) and Educational Programs that Work, both published by the United States Office (now Department) of Education.

During the 1979-80 school year, 17 adopting school systems agreed to participate in an impact study of Talents Unlimited. The adoptees were asked for pre- and post-test data from at least one talent area. Complete data were received from 10 of those agreeing to participate. One of the 10 adopters was excluded because it was determined that the posttest data were collected under conditions considered by the evaluators to be invalid. Of the seven adopters not returning complete data, most were lacking posttest scores.

This report provides the results of 9 adopters and includes

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all five talent areas. Grades 1 through 6 are also represented. In each case, pretest and posttest data are analyzed from the TU students and control students. All areas of the continental United States and Alaska are represented. The results are arranged by site.

Site: Lake Village, Arkansas

This TU Project was used in three schools in Lake Village, Arkansas to develop the talents of communication, forecasting, decision making, productive thinking, and planning. The report examines the outcomes from the project. Activities specifically related to the implementation of the project were not available to the evaluation team. The following sections describe the outcomes for each talent.

Talent: Communication

The purpose of this component is to assist the student in the development of his/her ability to effectively use and interpret both verbal and non-verbal forms of communication, to express his/her ideas, feelings, and needs to others. Specific behaviors related to this talent include: producing many words that fit different catagories; using a variety of words to make comparisons or to show relationships and associations; and organizing words into a meaningful network of ideas to yield a single product or multiple responses. It is hoped that the student receiving instruction in this talent might also demonstrate the capacity for participating in another's feelings or ideas by sharing similar experiences or thoughts.

An intact pretest/posttest control group design was used. Twenty-one second grade students from Reeves Elementary School were selected as the TU (or treatment) group, to receive instruction in the Communications Talent of the Talents Unlimited Project. Twenty-seven students in the second grade at Dermott Elementary School served as

the control group. Although no specific group selection procedures were reported, control of threats to external validity was evidently attempted through the selection of students within the same grade and municipality, and threats to internal validity were controlled by the use of this design and by the use of equivalent Primary forms in pre- and post-testing. All 48 students were assessed on Behaviors 3 and 5 as measured by the Communications Criterion-Referenced Talent Test (Primary, Forms A and B). The pretest (Primary, Form B) was administered to the TU (treatment) group October 8, 1979 and to the control group on October 9, 1979. The posttest (Primary, Form A) was administered to the TU group May 7, 1980 and to the control group the following day.

From the 21 students participating in the implementation of TU Project activities concerned with the development of Behaviors 3 and 5 of the Communications Talent, pretest data on two students was incomplete, resulting in an attrition rate of 9.5%. Complete posttest data were unavailable on 2 of the 27 students in the control group, an attrition rate of 7.4%. Change scores were computed from pretest and posttest data for both treatment and control groups. Differences between groups, based on means and standard deviations of their change scores for each behavior (3 and 5), were then tested by using the *t*-test and resultant data are summarized in Table 1.

As indicated in Table 1 a difference between groups, significant at the .001 level, was found with respect to Behavior 3 of the Communications Talent, indicating that TU students significantly outperformed students not receiving TU instruction in Behavior 3. Table 2 shows no significant difference between groups with respect to Behavior 5 of the Communications Talent; however, the TU students

Table 1

A Summary of the t-test Comparison of TU and Control Group Data for Communications Talent Behaviors 3 and 5

		N	Mean gain	SD	t
Behavior 3	TU Group	19	6.63	4.34	6.52*
	Control Group	25	- .48	2.24	
Behavior 5	TU Group	19	2.00	2.83	1.61
	Control Group	25	.72	2.44	

*$p < .001$

gained almost three times as much as did the control students.

Talent: Forecasting

The purpose of this component of the Talents Unlimited program is to encourage students to consider all the causes and/or effects for a given situation. Frequently used questions for stimulating such thought begin with, "What might have caused. . ." or, "What might happen if. . ." The talent for thoughtful answers to these questions has been labeled forecasting, the ability to employ divergent thinking in order to predict different causes and effects for various phenomena.

The evaluation design used was an intact pretest/posttest control group design. This design was used to control for the confounding effect of events other than the treatment that would affect students between pre- and post-testing. Fifty-nine fifth-grade students at Lake Village School participated in the program. There was no information available to the evaluators on group selection. Initially, the experimental (TU)

group contained 30 students and the control group contained 29 students.

The pre and post measurement was taken on equivalent forms (Intermediate Forms B and A) of the Forecasting Criterion Referenced Talent Test. Intermediate Form B was administered as a pretest on October 8, 1979, and Intermediate Form A was used for posttesting on May 6, 1980.

Change scores between pretest and posttest were computed for both experimental and control groups. Difference between groups was then tested for statistical significance ($p < .05$), based on means and standard deviations, by the use of the t-test. Table 2 summarizes the results.

Table 2

t-test Summary Table Comparing TU and Control Group with Change Scores for Forecasting Talent

Talent	Group	N	Mean gain	SD	t
Forecasting	TU	26	3.2	2.34	4.38*
	Control	26	.3	2.28	

*$p < .001$

As indicated in Table 2, a statistically significant difference between the TU group and the control group was found. The probability level of significance ($p < .001$) exceeded the .05 level stated in the objective. An attrition rate of 13.3% for the TU group and 10.3% for the control group reduced each group size to 26 students by the end of the project year.

Talent: Decision Making

The purpose of this component of the Talents Unlimited Program is to encourage students to outline, weigh, make final judgments, and defend his or her decision to the many alternatives to a problem he/she wishes to solve. These decisions must be made in terms of limitations, relevancy, and people affected, according to his or her needs and/or goals.

An intact pretest/posttest control group design was used. No information was available on group selection. The design used controls for intrusion of events that would affect students between pre- and post-testing.

Sixth grade students at Central and Dermott Elementary Schools in Lake Village, Arkansas participated in the program. Forty-five students were involved in the program; 21 students in the experimental (TU) group and 24 in the control group.

Pre and post measurements were taken on equivalent forms (Intermediate Forms B and A) of the Decision Making Criterion Referenced Talent Test. Intermediate Form B was administered on October 8, 1979 and Intermediate Form A was administered on May 9, 1980.

Even though almost twice as many TU students increased from pretest to posttest (43% vs. 21%), no statistically significant difference was found between the TU group and the control group. (At the rejection level of .10, chi square was not found to be statistically significant.)

Table 3

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups for Decision Making Talent

	Group		
	TU	Control	
Improved	9 (6.53)	5 (7.47)	14
Not Improved	12 (14.47)	19 (16.53)	31
	21	24	

[Expected frequency ( )]

$X^2 = 2.61$

critical X^2 (.10,1) = 2.71

Talent: Productive Thinking

The Productive Thinking Talent encourages students to think of many, varied, and unusual ideas. Students are then encouraged to improve on these ideas.

The same basic intact pretest/posttest control group design was used in assessing this talent. Seventeen TU students and 29 control students were included. All students were in the first grade. One student was dropped from each group as no posttest scores were available. The TU CRT on productive thinking was used in the evaluation. Specifically, the Originality and Flexibility scales were used.

A t-test comparing the gains of TU students with control students was used. Table 4 summarizes the results.

Table 4

A Summary of t-test Comparison of TU and Control Group Data for Productive Thinking Talent

		N	Mean gain	SD	t
Flexibility	TU Group	16	7.8	5.04	.40
	Control Group	28	7.5	6.36	
Originality	TU Group	16	13.9	14.04	4.10*
	Control Group	28	9.2	12.67	

*$p < .001$

TU students outperformed control students on both subtests. The difference was statistically significant at the .001 level for the Originality subtest and was not statistically significant for the Flexibility subtest.

Talent: Planning

The purpose of this component of Talents Unlimited is to encourage students to use four planning parts to arrive at a workable plan. The four planning parts are: (1) tell what is to be done, (2) tell the things needed in order to plan, (3) tell the steps-in-order for a plan, and (4) tell problems that may occur.

An intact pretest/posttest control group design was used. No information was available on the selection of groups. Pre and post measurement used Intermediate Forms B and A of the Talents Unlimited Planning Test respectively. The groups were compared on the basis of the proportion of students in each group who made pre- to post-test gains.

A chi square contingency table analysis was used.

In Lake Village, Arkansas, the Planning Talent was implemented in grades 3 and 4 at Reeves and Central Elementary Schools respectively. Similar schools and like grades were used as controls. The results can be found in Tables 5 and 6.

Table 5

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups for for Planning Talent, Grade 3

	Group		
	TU	Control	
Improved	4 (1.74)	0 (2.26)	4
Not Improved	13 (15.27)	22 (19.74)	35
	17	22	39

[Expected frequency ( )]

$X^2 = 20.43$

critical X^2 (.10,1) = 2.71

Table 6

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups for Planning Talent, Grade 4

	Group		
	TU	Control	
Improved	9 (5.24)	1 (4.76)	10
Not Improved	13 (16.76)	19 (15.24)	32
	22	20	42

[Expected frequency ( )]

$X^2 = 56.66$

critical X^2 (.10,1) = 2.71

The results indicate that the TU groups significantly outperformed the control groups at both grade levels.

Summary

Results of the project were positive but not always statistically significant. In the area of communication, the data supported the accomplishments of students in dealing with Behavior 3, but did not support their accomplishments with Behavior 5 beyond a reasonable doubt. The performance of students on the Forecasting talent was impressive; the difference between TU and control groups was statistically significant at the .001 level. For the talent of Decision Making, the results indicated more positive change for the TU group; however, this

difference was not statistically significant at the required .05 level. Students receiving the TU treatment outperformed the control students in both "Flexibility" and "Originality" of the Productive Thinking talent. The differences were statistically significant for "Originality." TU outperformed significantly control students in grades 3 and 4 on the Planning talent. These results are confounded by the lack of information regarding the actual implementation of the TU program. It can be concluded that students receiving the TU treatment outperformed the control students in every case.

Site: Little Falls, New York

During the 1979-80 school year, the Decision Making Talent was implemented in grade 4 of Monroe Street School in Little Falls. Similar students at Benton Hall School in the same system were administered pre- and post-tests (TU Decision Making CRT's) at the same time.

The purpose of this component of the Talents Unlimited Program is to encourage students to outline, weigh, make final judgments, and defend his or her decision to the many alternatives to a problem he/she wishes to solve. These decisions must be made in terms of limitations, relevancy, and people affected, according to his or her needs and/or goals.

An intact pretest/posttest control group design was used. No information was available on group selection. The design used controls for intrusion of events that would affect students between pre- and post-testing. Pretest and posttest scores were analyzed to determine the frequency of individuals who showed improvement.

A chi square analysis was performed to determine if a significant difference existed between the treatment group and control group. This analysis revealed that there was a significant difference at the .10 level between the experimental and control groups for fourth grade. These findings are summarized in Table 7.

Table 7

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups

	Group		
	TU	Control	
Improved	16 (8.40)	2 (9.60)	18
Not Improved	5 (12.60)	22 (14.40)	27
	21	24	

[Expected frequency ( )]

$X^2 = 21.487$

critical X^2 (.10, 1) = 2.71

Site: Homer, Alaska

During the 1979-80 school year, the Forecasting Talent was implemented in grades 1 and 3 of East Homer School in Homer, Alaska. Similar students at Soldotna School in Soldotna, Alaska were also tested using the TU Forecasting CRT.

The purpose of this component of the Talents Unlimited program is to encourage students to consider all the causes and/or effects for a given situation. Frequently used questions for stimulating such thought begin with, "What might have caused. . ." or, "What might happen if. . ." The talent for thoughtful answers to these questions has been labeled forecasting, the ability to employ divergent thinking in order to predict different causes and effects for various phenomena.

The evaluation design used was an intact pretest/posttest control group design. This design was used to control for the confounding effect of events other than the treatment that would affect students between pre- and post-testing.

Pretest and posttest scores were analyzed to determine the gain score for each individual. A t-test for each grade was performed to determine if a significant difference between the treatment group and control group existed. After this analysis, it was revealed that there was a significant difference at the .10 level between the experimental and control groups for first grade. An analysis identical to the one performed for first grade indicated a nonsignificant difference at the .10 level between the experimental and control groups for third grade.

These findings are summarized in Table 8. It can be concluded that the TU program in forecasting was successful in first grade but judgment must be withheld for third grade.

Table 8

Summary of Experimental and Control Data for Forecasting of First and Third Grades

Grade	Group	N	Mean gain	SD	t
1	TU	22	3.18	3.42	2.23*
1	Control	18	1.94	2.61	
3	TU	17	2.12	4.13	1.195
3	Control	18	1.33	3.44	

*$p < .05$.

Site: San Antonio, Texas

During the 1979-80 school year, the Forecasting Talent was implemented at the fourth grade level in the Cambridge School in San Antonio, Texas. Similar students were tested at the same time at Park Village School.

The purpose of this component of the Talents Unlimited program is to encourage students to consider all the causes and/or effects for a given situation. Frequently used questions for stimulating such thought begin with, "What might have caused. . ." or, "What might happen if. . ." The talent for thoughtful answers to these questions has been labeled forecasting, the ability to employ divergent thinking in order to predict different causes and effects for various phenomena. The evaluation design used was an intact pretest/posttest control group design. This design was used to control for the confounding effect of events other than the treatment that would affect students between pre- and post-testing.

The CRT for forecasting is available in both the primary and intermediate forms for use at the fourth grade level. In this project, the intermediate form was used at both pre- and post-testing. In this case a pretest was given to both groups (in October of the school year, within two days of each other, before any students received instruction in the forecasting talent). At the end of the school year, after the forecasting treatment of the Talents Unlimited group and regular treatment of the control group (latter part of May, within one week of each other), a posttest was given.

Results of the t-test analysis comparing the TU and control groups is in Table 9.

Table 9

t-test Summary Table Comparing TU and Control Group Change Scores

Talent	Group	N	Mean gain	SD	t
Fore-casting	TU	21	2.71	2.51	4.14*
	Control	18	- .33	2.00	

*p < .001

Statistical significance was achieved at the .001 level, surpassing the significance at the .10 level. Thus, highly significant positive results from the Talents Unlimited treatment over no treatment, i.e., the mean of the change scores from the Talent Unlimited group are significantly higher than the same means from the control group. Students in the fourth grade treatment class in San Antonio obviously reacted extremely well to the Talents Unlimited methods, as evidenced by a gain in the difference mean of the group of more than a whole standard deviation.

Site: Logan, Utah

The Communication Talent was implemented at the Adams School in Logan, Utah for fifth graders during the 1979-80 school year. A similar group of control students was pre- and post-tested at the same time as the TU students.

The purpose of this component is to assist the student in the development of his/her ability to effectively use and interpret both verbal and non-verbal forms of communication, to express his/her ideas, feelings, and needs to others. Specific behaviors related to this talent include: producing many words that fit different categories; using a variety of words to make comparisons or to show relationships and associations; and organizing words into a meaningful network of ideas to yield a single product or multiple responses. It is hoped that the student receiving instruction in this talent might also demonstrate the capacity for participating in another's feelings or ideas by sharing similar experiences or thoughts.

To establish that the Talents Unlimited treatment caused improved talent accomplishments in students required the use of a Talents Unlimited treatment group and a similar comparison group which did not receive the Talents Unlimited treatment.

The most effective method of setting up a treatment group/comparison group design is to randomly assign students, within each grade level, to the two groups. Data concerning the selection of these groups were not available, and, therefore, this evaluation is limited in its ability

to provide a definitive test of the program objectives or a determination of the effectiveness of the Talents Unlimited process in these schools. The selection of subjects using other methods threatens the internal and external validity of the evaluation design.

A major component of the evaluation process is the instrumentation and testing. The instruments used were the Talents Unlimited Criterion Referenced Tests, which have been field tested with Talents Unlimited programs. There are tests developed for each of five (5) talent areas.

The Communication CRT's were administered in September, 1979, to obtain pretest data, and in May, 1980, as posttest measures. Although pretest data were gathered on two Communications behaviors, posttest included data on only one behavior, that of getting the students to organize words into meaningful networks of ideas yielding a single product or multiple responses. It is critical that the pretest data be collected before the students receive any treatment, and, as with the other process information, the information concerning appropriate timing of pretests was unavailable.

A *t*-test was used to compare pretest to posttest changes in the scores of the students receiving Talents Unlimited instruction to the scores of the students in the comparison group. Thirty-one (31) fifth grade students were enrolled in the Talents Unlimited group of the project in September, 1979. Because of the lack of either pretest or posttest data, 19 experimental students were included in the analysis. There were originally 28 control students in the comparison group. Pretest and posttest scores were available for 22 of these students, and they were included in the analyses. The attrition rate of 39% for the experimental

group was considerable. In addition, Behavior 3 was not posttested.

The results are noted in Table 10;

Table 10

A Summary of the t-test Comparison of TU and Control Group Data for Communications Talent Behaviors 3 and 5

	Group	N	Mean gain	SD	t
Behavior 5	TU	19	1.84	4.51	.40
	Control	22	1.32	3.79	

The data do not provide evidence that the TU students significantly outperformed the control. The TU sample did outgain slightly the control students.

Site: McAllen, Texas

During the 1979-80 school year, the Ben Milam School in McAllen, Texas implemented the Productive Thinking Talent at the fourth grade level. Similar fourth grade students in the Sam Rayburn School were tested at the same time as control students.

The Productive Thinking Talent encourages students to think of many, varied, and unusual ideas. Students are then encouraged to improve on these ideas.

An intact pretest/posttest control group design was used in assessing this talent. Twenty-five TU students and 23 control students were included. All students were in the fourth grade. One student was dropped from the TU group as no pretest scores were available. Twelve control students were omitted because of missing data. The TU CRT on productive thinking was used in the evaluation. Specifically, the Originality and Flexibility scales were used.

A *t*-test comparing the gains of TU students with control students was used. Table 11 summarizes the results.

The TU group significantly outperformed the control group on both Flexibility and Originality. It must be concluded that the TU process was effective in McAllen, Texas.

Table 11

A Summary of t-test Comparison of TU and Control Group Data for Productive Thinking Talent

	Group	N	Mean gain	SD	t
Flexibility	TU	25	9.0	5.98	14.03*
	Control	23	-1.0	6.20	
Originality	TU	25	23.9	13.32	23.47*
	Control	23	- 1.9	15.62	

*$p < .001$

Site: Staten Island, New York

During the 1979-80 school year, the Staten Island School System in New York implemented the Decision Making Talent in grade 3 at P.S. #36. Similar students in grade 3 at P.S. #42 were also pre- and post-tested on the Decision Making CRT at the same time.

The purpose of this component of the Talents Unlimited Program is to encourage students to outline, weigh, make final judgments, and defend his or her decision to the many alternatives to a problem he/she wishes to solve. These decisions must be made in terms of limitations, relevancy, and people affected, according to his or her needs and/or goals.

An intact pretest/posttest control group design was used. No information was available on group selection. The design used controls for intrusion of events that would affect students between pre- and post-testing.

Both groups were given Form B of the primary decision making test in September as a pretest, and they were given Form A of the primary decision making test in May as a posttest. The scores were recorded as either average, below average, or below average minus by the evaluator and based upon the criteria stated in the Arbitrary Judgment Guidelines for average decision-making behaviors. The behavioral guidelines are as follows:

1. The student will identify at least five alternative solutions to the problem.

2. The student will clearly reflect the weighing process in his reasons.

3. The student will make a final choice.

4. The student will justify his choice with at least three different reasons.

A performance which indicated that a student could not operate in all four of the decision-making behaviors to the degree identified for average performance were rated below average. A completely irrelevant answer was rated as below average minus.

There were 29 students in the test group. Four students were not given a posttest, because they did not have test booklets, and were omitted from the evaluation. Two students in this group gained from below average to average on their scores. Of the 33 students in the control group, two students gained from below average to average, but two students had scores that showed negative gain. One student went from average to below average and the other went from below average to below average minus.

The data for this evaluation were nominal; therefore a chi square was performed to determine the difference between the groups. The results were as follows: Chi square was .30 with 1 degree of freedom (see Table 12). Based on these results it was found that there was no significant difference between the Talents Unlimited group and the control group even though the TU group performed better than expectancy and the control group less than expectancy.

Table 12

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups in Decision Making Talent

	Group		
	TU	Control	
Improved	2 (1.72)	2 (2.27)	4
Not Improved	23 (23.27)	31 (30.72)	54
	25	33	

[Expected frequency ( )]

$X^2 = .30$

critical X^2 (.10,1) = 2.71

Site: Kentwood, Michigan

The purpose of this component of Talents Unlimited is to encourage students to use four planning parts to arrive at a workable plan. The four planning parts are: (1) tell what is to be done, (2) tell the things needed in order to plan, (3) tell the steps-in-order for a plan, and (4) tell problems that may occur.

An intact pretest/posttest control group design was used. No information was available on the selection of groups. Pre and post measurement used Intermediate Forms B and A of the Talents Unlimited Planning Test respectively. The groups were compared on the basis of the proportion of students in each group who made pre- to post-test gains. A chi square contingency table analysis was used.

The Planning Talent was implemented in the fifth grade at Bowen School. Fifth graders in a similar school were used as a control. The results can be found in Table 13.

As can be seen in Table 13, the TU group significantly outperformed the control students. Thus, more students exposed to the Talents Unlimited treatment improved their planning talents than did students not exposed to TU.

Table 13

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups for Planning Talent

	Group		
	TU	Control	
Improved	9 (5.98	4 (7.02)	13
Not Improved	14 (17.02)	23 (19.98)	37
	23	27	50

[Expected frequency ( )]

$X^2 = 36.48$

critical X^2 (.10,1) = 2.71

Site: Cache County, Utah

The purpose of this component of Talents Unlimited is to encourage students to use four planning parts to arrive at a workable plan. The four planning parts are: (1) tell what is to be done, (2) tell the things needed in order to plan, (3) tell the steps-in-order for a plan, and (4) tell problems that may occur.

An intact pretest/posttest control group design was used. No information was available on the selection of groups. Pre and post measurement used Intermediate Forms B and A of the Talents Unlimited Planning Test respectively. The groups were compared on the basis of the proportion of students in each group who made pre- to post-test gains. A chi square contingency table analysis was used.

The Planning Talent was implemented in the fifth grade at Millville School. Fifth graders at a similar school were used as a control. The results can be found in Table 14.

As can be seen in Table 14, the TU group significantly outperformed the control students. Thus, more students exposed to the Talents Unlimited treatment improved their planning talents than did students not exposed to TU.

Table 14

Summary Table for Chi Square Test Comparing Observed and Expected Score Frequencies of TU and Control Groups of Planning Talent

	Group		
	TU	Control	
Improved	6 (3.82)	1 (3.18)	7
Not Improved	24 (26.18)	24 (21.82)	48
	30	25	55

[Expected frequency ( )]

$X^2 = 19.01$

critical X^2 (.10,1) = 2.71

Summary

Table 15 provides a summary of the experimental results from the nine adoption sites that are included in this report.

Table 15

Summary Table for All 9 Adoption Sites Included in the Report

Site	Grade	Talent	Level of significance
Lake Village, AR	2	Communication (Behavior 3)	$p < .001$
Lake Village, AR	2	Communication (Behavior 5)	NS
Lake Village, AR	5	Forecasting	$p < .001$
Lake Village, AR	6	Decision Making	NS
Lake Village, AR	1	Productive Thinking (Flexibility)	NS
Lake Village, AR	1	Productive Thinking (Originality)	$p < .001$
Lake Village, AR	3	Planning	$p < .001$
Lake Village, AR	4	Planning	$p < .001$
Little Falls, NY	4	Decision Making	$p < .001$
Homer, AK	1	Forecasting	$p < .05$
Homer, AK	3	Forecasting	NS
San Antonio, TX	4	Forecasting	$p < .001$

Table 15 Continued

Site	Grade	Talent	Level of significance
Logan, UT	5	Communication (Behavior 3)	NS
Logan, UT	5	Communication (Behavior 4)	NS
McAllen, TX	4	Productive Thinking (Flexibility)	$p < .001$
McAllen, TX	4	Productive Thinking (Originality)	$p < .001$
Staten Island, NY	3	Decision Making	NS
Kentwood, MI	5	Planning	$p < .001$
Cache County, UT	5	Planning	$p < .001$

The results included in this report support the validity of the Talents Unlimited Program. All of the various studies favored the TU program and most of them achieved statistical significance. Further, data were included from all five talent areas, grades 1 through 6, and all areas of the country.